





September 12, 2015

(b) (6)

Location Code: GKMTW12

(b) (6), (b) (9) Durango, CO

Re: Groundwater Well Sampling Results

Dear (b) (6)

Thank you for participating in the private water well sampling conducted by the U.S. Environmental Protection Agency (EPA) in coordination with the San Juan Basin Health Department (SJBHD).

This letter provides the results for the water sample(s) collected from your private water well. The water sample(s) were submitted to, and analyzed by, a private certified laboratory for the metals that could have been present in water from the Gold King Mine release.

The test results for your well water were compared to the National Drinking Water Standards, otherwise known as the Maximum Contaminant Levels (MCLs). The results of the analysis are provided in the enclosed table. Though these standards do not apply to private domestic water wells such as yours, we have included the enclosed table so that you may compare the results with the Drinking Water Standards. None of these metals were present in the water sample(s) collected from your property above a level of concern for human health exposure.

The Colorado Department of Public Health and Environment recommends using the Water Quality Interpretation Tool created by Colorado State University in collaboration with the Colorado Water Institute to get more information regarding the metals examined in your well. The Water Quality Interpretation Tool is available online at https://erams.com/wqtool/.

If you have any health related questions regarding these test results, please contact Flannery O'Neil with the San Juan Basin Health Department (SJBHD) at (970) 247-5702. If you would like to discuss your sample results with an EPA representative, please contact Deb McKean at (303) 579-4371.

Enclosure

CC:

Colorado Department of Public Health and Environment San Juan Basin Health Department San Juan County Public Health







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EPA has also established National Secondary Drinking Water Regulations that set non-mandatory water quality standards for 15 contaminants. EPA does not enforce these "secondary maximum contaminant levels". They are established only as guidelines to assist public water systems in managing their drinking water for aesthetic considerations, such as taste, color and odor. These contaminants are not considered to present a risk to human health at the secondary maximum contaminant level.

The concentration of iron in your well water collected before treatment (GKMTW12_080915) was above the secondary maximum contaminant level for iron which is 300 μ g/L. Iron is an essential element for human nutrition; however, high iron can cause constipation and other gastrointestinal effects. In addition, high iron may stain household fixtures and impart a metallic taste and red color to the water.

The concentration of manganese in in your well water before treatment (GKMTW12_080915) was above the secondary maximum contaminant level of 50 µg/L. High manganese can impart

an unpleasant taste and odor to drinking water and can cause mineral deposits on plumbing features. The EPA Health Advisory for manganese is available at this location: http://www.epa.gov/safewater/ccl/pdfs/reg_determine1/support_ccl_magnese_dwreport.pdf

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		Sample Number:	GKMTW12_08091	15	GKMTW14_08091	15
	S	ampling Location:	GKMTW12		GKMTW12	
		Matrix:	Water		Water	
		Units:	ug/L		ug/L	
		Date Sampled:	8/9/2015		8/9/2015	
		Date Analyzed:	8/12/2015		8/12/2015	
Parameter	Analysis	Result_Units	Result			Flag
Antimony	ICPMS Tot. Rec. Metals	ug/L	0.03	U	0.03	U
Arsenic	ICPMS Tot. Rec. Metals	ug/L	1		0.7	U
Barium	ICPMS Tot. Rec. Metals	ug/L	191		98.3	
Cadmium	ICPMS Tot. Rec. Metals	ug/L	0.03	U	0.03	U
Chromium	ICPMS Tot. Rec. Metals	ug/L	3.6	υ	3.6	U
Cobalt	ICPMS Tot. Rec. Metals	ug/L	0.3		0.3	
Lead	ICPMS Tot. Rec. Metals	ug/L	0.8		0.2	U
Molybdenum	ICPMS Tot. Rec. Metals	ug/L	2.7		1.3	
Selenium	ICPMS Tot. Rec. Metals	ug/L	0.2	U	0.2	υ
Silver	ICPMS Tot. Rec. Metals	ug/L	0.03	U	0.03	U
Thallium	ICPMS Tot. Rec. Metals	ug/L	0.01	U	0.01	U
Vanadium	ICPMS Tot. Rec. Metals	ug/L	1.8	U	1.8	U
Zinc	ICPMS Tot. Rec. Metals	ug/L	0.5	U	0.5	U
Aluminum	ICPOE Tot. Rec. Metals	ug/L	16	U	16	Ų.
Beryllium	ICPOE Tot. Rec. Metals	ug/L	0.07	U	0.07	U
Calcium	ICPOE Tot. Rec. Metals	ug/L	72800		108000	
Copper	ICPOE Tot. Rec. Metals	ug/L	11.1		0.8	U
Iron	ICPOE Tot. Rec. Metals	ug/L	2300		16	U
Magnesium	ICPOE Tot. Rec. Metals	ug/L	21300		15400	
Manganese	ICPOE Tot. Rec. Metals	ug/L	124		0.2	U
Nickel	ICPOE Tot. Rec. Metals	ug/L	0.6	U	0.6	U
Potassium	ICPOE Tot. Rec. Metals	ug/L	2870		2300	
Sodium	ICPOE Tot. Rec. Metals	ug/L	17000		3920	
Mercury	Mercury in water by 7473	ug/L	0.6	U	0.6	UJ

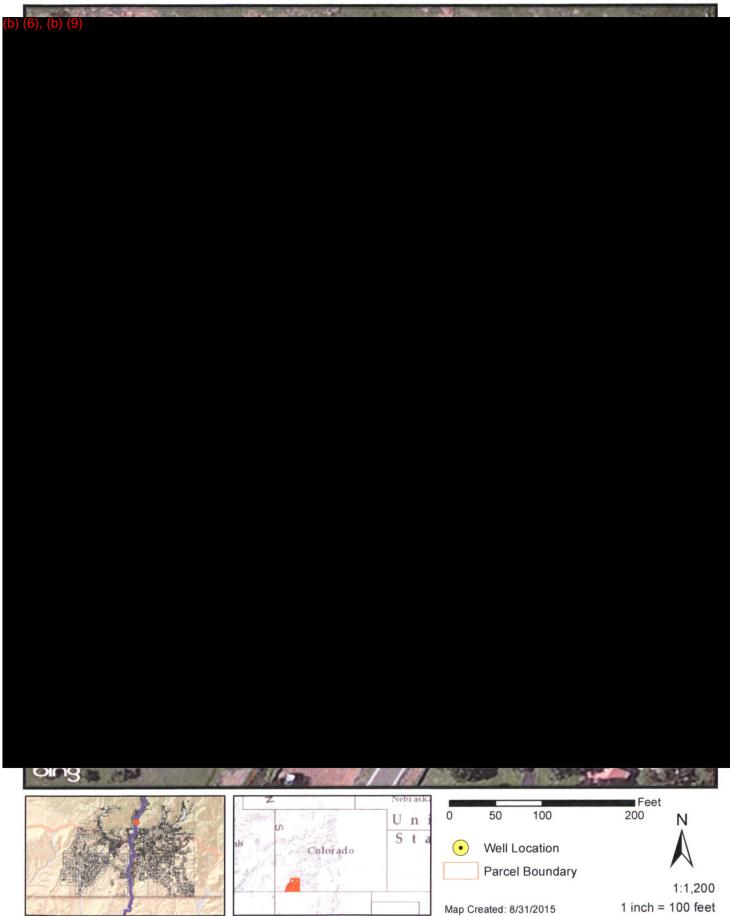
Water Sample ID: GKMTW12





Water Sample ID: GKMTW12

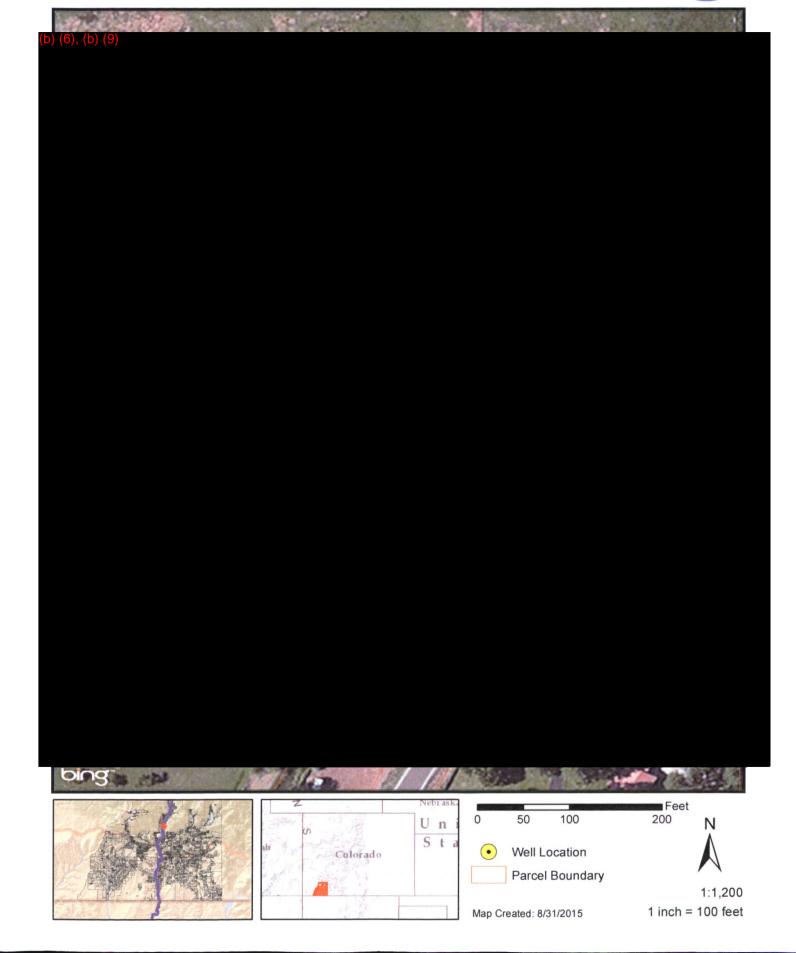




no e-file; same as #12

Water Sample ID: GKMTW13





9/22/15

					L'	
		Station ID				GKMTW12
		Sample ID				GKMTW12_080915
		Sample Date				8/9/2015
		Sample time				16:40
		Latitude				(b) (6), (b).
Analyte	2	Longitude				(9)
						Sub Location
				Colorado		
Metals, T	otal	CAS NO	Units	Water Standard	EPA MCL	Lab Result
Aluminum	A,B	7429-90-5	ug/L	5000	200	16 U
Antimony	п	7440-36-0	ug/L	6	6	0.03 U
Arsenic		7440-38-2	ug/L	10	10	1
Barium		7440-39-3	ug/L	2000	2000	191
Beryllium		7440-41-7	ug/L	4	4	0.07 ∪
Cadmium		7440-43-9	ug/L	5	5	0.03 U
Calcium		7440-70-2	ug/L		_	72800
Chromium		7440-47-3	ug/L	100	100	3.6 U
Cobalt	A	7440-48-4	ug/L	50		0.3
Copper	A	7440-50-8	ug/L	200	1300	11.1
Iron	A,B	7439-89-6	ug/L	5000	300	2300
Lead	A	7439-92-1	ug/L	100	15	0.8
Magnesium		7439-95-4	ug/L			21300
Manganese	A,B	7439-96-5	ug/L	200	50	124
Mercury		7439-97-6	ug/L/	2	2	0.6 U
Molybdenum		7439-98-7	ug/L			2.7
Nickel	A	7440-02-0	ug/L	200		0.6 U
Potassium		7440-09-7	ug/L			2870
Selenium		7782-49-2	ug/L	50	50	0.2 U
Silver	В	7440-22-4	ug/L		100	0.03 U
Sodium		7440-23-5	ug/L			17000
Thallium		7440-28-0	ug/L	2	2	0.01 U
Vanadium	A	7440-62-2	ug/L	100		1.8 U
Zinc	A,B	7440-66-6	ug/L	2000	5000	0.5 U

A- CDPHE Agricultural Standards (Jan./2013)

B- EPA Secondary MCL (May 2009)

U = The analyte was analyzed for, but/was not detected above the level of the reported sample quantitation limit.

J = Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

J- = The result is an estimated quantity, but the result may be biased low.

UJ = The material was analyzed for, but was not detected. The associated value is an estimate and may be inaccurate or imprecise UJB = The analyte was detected in the sample below the reporting limit and in either the associated laboratory blank or field blank; the analyte result was reported as non-detected at the RL due to blank contamination. The reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample

UB = The analyte was detected in the sample below the Reporting Limit (RL) and in either the associated laboratory blank or field blank; the analyte result was reported as non-detected at the RL due to blank contamination.

J+= The result is an estimated quantity, but the result may be biased high.

R = Reported value is "rejected." The sample results are rejected due to serious deficiencies in meeting QC criteria. The data are unusable. The analyte may or may not be present in the sample.

F1 = MS and/or MSD Recovery is outside acceptance limits.

HF = Field parameter with a holding time of 15 minutes. Test performed by laboratory at client's request.

^{* =} The result exceeds maximum contaminant level

9/22/15

		Station ID				GKMTW12
		Sample ID				GKMTW14_080915
		Sample Date				8/9/2015
		Sample time				16:40
		Latitude				(b) (6), (b)
Analyte	e	Longitude				(9)
						Sub Location
				Colorado		Kitchen tap post filtrati
Metals, T	otal	CAS NO	Units	Water Standard	EPA MCL	Lab Result
Aluminum	A,B	7429-90-5	ug/L	5000	200	16 U
Antimony		7440-36-0	ug/L	6	/6	0.03 U
Arsenic		7440-38-2	ug/L	10	/ 10	0.7 U
Barium		7440-39-3	ug/L	2000	2000	98.3
Beryllium		7440-41-7	ug/L	4	4	0.07 ∪
Cadmium		7440-43-9	ug/L	5	5	0.03 U
Calcium		7440-70-2	ug/L			108000
Chromium		7440-47-3	ug/L	100	100	3.6 U
Cobalt	A	7440-48-4	ug/L	50/		0.3
Copper	A	7440-50-8	ug/L	200	1300	0.8 U
Iron	A,B	7439-89-6	ug/L	5000	300	16 U
Lead	A	7439-92-1	ug/L	100	15	0.2 U
Magnesium		7439-95-4	ug/L			15400
Manganese	A,B	7439-96-5	ug/L	200	50	0.2 U
Mercury		7439-97-6	ug/L	2	2	0.6 UJ
Molybdenum		7439-98-7	ug/L			1.3
Nickel	A	7440-02-0	ug/L	200		0.6 U
Potassium		7440-09-7	ug/L			2300
Selenium		7782-49-2	ug/L	50	50	0.2 U
Silver	В	7440-22-4	ug/L		100	0.03 U
Sodium		7440-23-5	ug/L			3920
Thallium		7440-28-0	ug/L	2	2	0.01 U
Vanadium	A	7440-62-2	ug/L	100		1.8 U
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Example

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	Sample Date				8/9/2015
	Sample time				16:40
	Latitude				(b) (6), (b) (9)
Analyte	Longitude				
Allalyte					Sub Location
			Colorado		Suo Location
Motels Total	CACNO	I I 'A		EDA MOI	I I D I
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Calcium	7440-70-2	ug/L			72800
Chromium	7440-47-3	ug/L	100	100	3.6 U
Cobalt	7440-48-4	ug/L			0.3
Copper	7440-50-8	ug/L		1300	11.1
Iron	7439-89-6	ug/L		300	2300
Lead	7439-92-1	ug/L		15	0.8
Magnesium	7439-95-4	ug/L			21300
Manganese	7439-96-5	ug/L		50	124
Mercury	7439-97-6	ug/L	2	2	0.6 U
Molybdenum	7439-98-7	ug/L			2.7
Nickel	7440-02-0	ug/L			0.6 U
Potassium	7440-09-7	ug/L			2870
Selenium	7782-49-2	ug/L	50	50	0.2 U
Silver	7440-22-4	ug/L		100	0.03 U
Sodium	7440-23-5	ug/L			17000
Thallium	7440-28-0	ug/L	2	2	0.01 U
Vanadium	7440-62-2	ug/L			1.8 U
Zinc	7440-66-6	ug/L		5000	0.5 U

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	Sample Date				8/9/2015
	Sample time				16:40 (b) (6), (b) (9)
	Latitude				(b) (c), (b) (c)
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					Sub Location
			Colorado		Kitchen tap post filtrati
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Manganese	7439-96-5	ug/L		50	0.2 U
Mercury	7439-97-6	ug/L	2	2	0.6 UJ
Molybdenum	7439-98-7	ug/L			1.3
Nickel	7440-02-0	ug/L			0.6 U
Potassium	7440-09-7	ug/L			2300
Selenium	7782-49-2	ug/L	50	50	0.2 U
Silver	7440-22-4	ug/L		100	0.03 U
Sodium	7440-23-5	ug/L			3920
Thallium	7440-28-0	ug/L	2	2	0.01 U
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	Station ID Sample ID Sample Date Sample Time Latitude Longitude				GKMTW12 GKMTW12_080915 8/9/2015 16:40 (b) (6), (b) (9)	GKMTW12 GKMTW14_080915 8/9/2015 16:40
Analyte	CAS No	Units	Colorado Water Standard	Ground Water MCL		
Metals, Total						
Aluminum	7429-90-5	ug/L	5000		16 U	16 U
Antimony	7440-36-0	ug/L	6	6	0.03 U	0.03 U
Arsenic	7440-38-2	ug/L	10	10	1	0.7 U
Barium	7440-39-3	ug/L	2000	2000	191	98.3
Beryllium	7440-41-7	ug/L	4	4	0.07 U	0.07 U
Cadmium	7440-43-9	ug/L	5	5	0.03 U	0.03 U
Calcium	7440-70-2	ug/L	_		72800	108000
Chromium	7440-47-3	ug/L	100	100	3.6 U	3.6 U
Cobalt	7440-48-4	ug/L	-50-		0.3	0.3
Copper	7440-50-8	ug/L	200-	1300	11.1	0.8 U
Iron	7439-89-6	ug/L	-300 -	300	2300	16 U
Lead	7439-92-1	ug/L	-50	15	0.8	0.2 U
Magnesium	7439-95-4	ug/L			21300	15400
Manganese	7439-96-5	ug/L	-50-	50	124	0.2 U
Mercury	7439-97-6	ug/L	2	2	0.6 U	0.6 UJ
Molybdenum	7439-98-7	ug/L			2.7	1.3
Nickel	7440-02-0	ug/L	400		0.6 U	0.6 U
Potassium	7440-09-7	ug/L	-0		2870	2300
Selenium	7782-49-2	ug/L	5020	50	0.2 U	0.2 U
Silver	7440-22-4	ug/L	-50-	100	0.03 U	0.03 U
Sodium	7440-23-5	ug/L			17000	3920
Thallium	7440-28-0	ug/L	2	2	0.01 U	0.01 U
Vanadium	7440-62-2	ug/L	-100		1.8 U	1.8 U
Zinc	7440-66-6	ug/L	-2000	5000	0.5 U	0.5 U